

### **AMENDMENTS TO THE DRAWINGS**

Attached hereto in an Appendix is one (1) sheet of drawings to replace one replacement drawing sheet filed in this application on July 2, 2009. The replacement sheet, which includes FIG. 4, replaces the replacement drawing sheet that also includes FIG. 4.

## REMARKS

1. In response to the Office Action mailed June 9, 2010, Applicants respectfully request reconsideration. Claims 1, 3, 5-11, 14, 15, 19, 22, 23, 25-34, 36, 38-51, 53 and 54 were last presented for examination. In the outstanding Office Action, claims 1, 3, 5-9, 19, 22, 23, 25-27, 34, 36, 38-42, 53 and 54 are rejected. By the foregoing Amendments, claims 25, 27-34, 39-51, 53 and 54 have been amended, claims 1, 3, 5-11, 14, 15, 19, 22, 23, 26, 36 and 38 have been cancelled, and claims 55-65 have been added. Thus, upon entry of this paper, claims 1, 6-11, 14, 15, 19, 22, 23, 25, 27-34, 39-51, 53 and 54 will be pending in this application. Of these thirty-five (35) claims, three (3) claims (claims 25, 34 and 55) are independent.
2. Based upon the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered and withdrawn.

### ***Claim Rejections under §102***

3. Claims 1, 5-7, 22, 25-27, 34, 38-40 and 53 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Australian Patent Application No. AU 200176077 to Single (hereinafter, "Single"). For at least the reasons provided below, Applicants respectfully request that these rejections be reconsidered and withdrawn.

### ***Claim 34***

4. Applicants' amended claim 34 recites, in part, "[a]n implantable hearing prosthesis, comprising: . . . a voltage converter circuit configured to convert a supply voltage to a battery voltage; and switch matrix configured to selectively connect a desired one of the batteries to the voltage converter circuit for charging of the desired one of the batteries." (See, Applicants' claim 34, above.) Claim 34 also recites "wherein the voltage converter circuit further connects the output circuit to the switch matrix and is configured to convert the voltage of the selected one of the batteries to a voltage for use by the output circuit." (See, Applicants' claim 34, above.)
5. Single is generally directed to a power management system for an implant, "such as a cochlear implant," that includes a power supply having multiple batteries. (See, Single, pg. 2,

lns. 2-5; pg. 6, lns. 11-20; pg. 14, lns. 32-35; and pg. 16, lns. 16-17.) The management system controls a switching means such that the implant draws power from each of the batteries independently. (*See*, Single, pg. 6, lns. 9-20.) Single also discloses that “[a] battery charging means that is mounted external to the body of the implantee can be used to recharge the batteries of the power supply.” (*See*, Single, pg. 12, lns. 3-4.) More specifically, Single states that “[w]here the prosthesis is a cochlear implant having an implanted antenna coil, the battery charging means also includes an antenna coil that through use of the inductive link . . . allows the implanted power supply to be recharged.” (*See*, Single, pg. 12, lns. 4-8.) In addition, when the external power source is available, the management system allows a selected battery to be recharged when necessary. (*See*, Single, pg. 12, lns. 26-29 and pg. 19, lns. 19-26.) Single also discloses that “it is preferred that whenever external power is available it is utilised as the power source by the implant.” (*See*, Single, pg. 12, lns. 21-22.)

6. In the Office Action, the Examiner alleges that the external battery charging means of Single is equivalent to a “conversion means for converting a power supply voltage to a battery voltage,” as previously recited in Applicants’ claim 1. (*See*, Office Action, pg. 3.) The Examiner also alleges that this same external battery charging means is also connected between an output circuit and a switch means, and is configured to convert the voltage of a battery to a voltage for use by an output circuit. (*See*, Office Action, pg. 5.) As noted above, the external battery charging means taught by Single is able to charge an implanted power supply through an antenna coil and may be used as the power source of the implant. (*See*, Single, pg. 12, lns. 3-8 and 21-25.) However, Applicants submit that Single fails to disclose that the external battery charger converts the voltage of one of the rechargeable batteries of Single’s implant “to a voltage for use by the output circuit.” (*See*, Applicants’ claim 34, above.) Rather, Single discloses that when the external battery charging means is being used, the charging means itself is used as the source of power, and not one of the batteries. (*See*, Single, pg. 12, lns. 18-25.) Moreover, Single specifically discloses that “it is preferred that whenever the external power source is being used by the implantee, **the implanted battery source will be disconnected** from the electrical equipment, such as the implant, by the switching means.” (*See*, Single, pg. 12, lns. 18-20; emphasis added.) Additionally, Applicants submit that Single fails to disclose that the

external battery charger connects Single's switching means to an output circuit of the implant. (See, Applicants' claim 34, above.) As noted above, Single's management system controls a switching means such that the implant draws power from the batteries. (See, Single, pg. 6, lns. 9-20.) However, Single fails to disclose that the switching means provides power from the batteries to the implant through the external battery charging means. Rather, as noted above, Single discloses that "it is preferred that whenever the external power source is being used by the implantee, **the implanted battery source will be disconnected** from the electrical equipment, such as the implant." (See, Single, pg. 12, lns. 18-20; emphasis added.)

7. As such, Applicants submit that the external battery charging means of Single is not equivalent to "a voltage converter circuit . . . wherein the voltage converter circuit further connects the output circuit to the switch matrix and is configured to convert the voltage of the selected one of the batteries to a voltage for use by the output circuit," as recited in Applicants' claim 34. Moreover, Applicants submit that Single fails to disclose any element that could be considered equivalent to a voltage converter circuit of an implantable hearing prosthesis "configured to convert a supply voltage to a battery voltage" and "wherein the voltage converter circuit further connects the output circuit to the switch matrix and is configured to convert the voltage of the selected one of the batteries to a voltage for use by the output circuit," as recited in Applicants' claim 34. As such, Applicants submit that Single fails to anticipate or render obvious Applicants' claim 34. Accordingly, Applicants respectfully submit that the rejection of claim 34 under §102 is improper and should be withdrawn.

8. Additionally, it is well recognized that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (See, MPEP §2131, quoting *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).) The MPEP makes it clear that for a *prima facie* rejection under 35 U.S.C. §102, "[t]he identical invention must be shown in **as complete detail as is contained in the . . . claim.**" (See, MPEP §2131.01, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); emphasis added.) For at least the reasons discussed above, Applicants submit that Single fails to disclose the conversion means recited in

Applicants' claim 34, in as complete detail as is contained in Applicants' claim 34. For this additional reason, Applicants respectfully submit that the rejection of claim 1 under §102 is improper and should be withdrawn.

***Claim 25***

9. Claim 25 recites, in part, “[a] method of managing the supply of power to an output circuit of an implantable hearing prosthesis comprising a voltage converter circuit and a plurality of rechargeable batteries, the method comprising the steps of: converting, with a voltage converter circuit, a supply voltage to a battery voltage.” (*See*, Applicants' claim 25, above.) Claim 25 further recites, “selectively connecting, using the switch matrix, a selected one of the batteries to the voltage converter circuit to enable the selected one of the batteries to be discharged through the output circuit; and converting, with the voltage converter circuit, the voltage output from the selected one of the batteries to a voltage for use by the output circuit.” (*See*, Applicants' claim 25, above.) For at least the reasons provided above with reference to claim 1, Applicants submit that Single fails to anticipate or render obvious all elements of claim 25. Specifically, Single does not include any “voltage converter circuit” of an implantable hearing prosthesis that converts “a supply voltage to a battery voltage” and converts “the voltage output from the selected one of the batteries to a voltage for use by the output circuit.” (*See*, Applicants' claim 25, above.)

10. Accordingly, Applicants respectfully submit that the rejection of claim 25 under §102 is improper and should be withdrawn.

***New Claim 55***

11. For the Examiner's benefit, Applicants will briefly discuss why Applicants' new claim 55 is allowable over the art of record.
12. Applicants' new claim 55 recites, in part, "[a]n implantable hearing prosthesis, comprising: . . . a voltage converter circuit configured to convert a supply voltage to a battery voltage; and a switch matrix configured to selectively connect a desired one of the batteries to the voltage converter circuit for charging of the desired one of the batteries." (*See*, Applicants' claim 55, above.) Claim 55 also recites "wherein the voltage converter circuit further connects the output circuit to the switch matrix and is configured to convert the voltage of the selected one of the batteries to a voltage for use by the output circuit." (*See*, Applicants' claim 55, above.) For at least the reasons provided above with reference to claim 34, Applicants submit that claim 55 is allowable over Single. Specifically, Single does not include any "voltage converter circuit" of an implantable hearing prosthesis that is "configured to convert a supply voltage to a battery voltage," that "connects the output circuit and the switch matrix," and that is further "configured to convert the voltage of the selected one of the batteries to a voltage for use by the output circuit." (*See*, Applicants' claim 55, above.)
13. Accordingly, Applicants respectfully submit that Applicants' new claim 55 is allowable over the art of record.

***Claim Rejections under §103***

14. Claims 3, 19 and 36 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Single in view of Japanese Patent Document No. JP 04334935 to Miwa et al. (hereinafter, "Miwa"). Claims 8 and 41 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Single in view of U.S. Patent No. 6,541,980 to Maki (hereinafter, "Maki"). Claims 9 and 42 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Single in view of Maki and further in view of U.S. Patent No. 5,553,294 to Nanno et al. (hereinafter, "Nanno"). Claims 23 and 54 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over

Single in view of Miwa and further in view of U.S. Patent Application Pub No. 2004/0095020 to Kernahan et al. (hereinafter, “Kernahan”).

15. For at least the reasons discussed above, Applicants submit that Single fails to anticipate or render obvious Applicants’ independent claims 1, 25 and 34. Additionally, Applicants submit that Miwa, Maki, Nanno and Kernahan fail to cure all of the deficiencies of Single.

16. Moreover, in the rejections of claims 3 and 36 in the Office Action, the Examiner relies upon element 6 of FIG. 1 of Miwa. However, Miwa is a Japanese-language document for which the Examiner has not provided an English-language translation. While the Examiner has provided an English-language abstract of Miwa, the abstract does not describe element 6. As such, it seems evident that the Examiner is relying upon the underlying Japanese document, and not the abstract. Applicants remind the Examiner that “[i]f the document is in a language other than English and the examiner seeks to rely on that document, **a translation must be obtained** so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection.” (See, Manual of Patent Examining Procedure (MPEP) §706.02(II); emphasis added.) Additionally, “[w]hen an abstract is used to support a rejection, **the evidence relied upon is the facts contained in the abstract, not additional facts that may be contained in the underlying full text document.**” (See, Manual of Patent Examining Procedure (MPEP) §706.02(II); emphasis added.) Applicants submit that the Examiner’s reliance on information not contained in the abstract of Miwa is improper. Accordingly, Applicants request that the rejections of claims 3 and 36 be withdrawn for at least this additional reason, or that a full translation of Miwa be provided so that Applicants have the ability to meaningfully respond to the Examiner’s rejections.

### ***Dependent claims***

17. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, Applicant respectfully asserts that the dependent claims are also allowable over the art of record.

***Allowable Subject Matter***

18. Applicants thank the Examiner for indicating the allowability of the subject matter recited in Applicant's claims 10, 11, 14, 15, 28-33 and 43-51.

***Amendments to the Drawings***

19. Applicants submit Replacement Drawing sheet herewith to correct reference numbers used in the previously filed replacement sheet for FIG. 4. In FIG. 4 of the replacement sheets filed July 2, 2009, reference number "7" was used to label the array of rechargeable batteries illustrated therein. Reference number "6" was used to label the array of rechargeable batteries illustrated in FIG. 1, and the specification of this application states that FIGS. 1 and 4 use like reference numerals. (*See*, specification of record, para. [0025].) As such, reference number "7" was changed to "6" in FIG. 4.

20. Additionally, in FIG. 4 of the replacement sheets filed July 2, 2009, reference number "6" was used to label a capacitor. Thus, this reference number has been removed to avoid the inclusion of duplicate reference symbols in FIG. 4.

***Conclusion***

21. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

22. Applicant makes no admissions by not addressing any outstanding rejections or bases of rejections. Furthermore, Applicant reserves the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application. Thus, cancellations of and amendments to the above claims, are not to be construed as an admission regarding the patentability of any claims.



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Respectfully submitted,

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## **APPENDIX**